1. (Amended) An electrical power generator for use in conjunction with a subterranean well, the generator comprising:

a fluid conduit configured for flow of fluid therethrough, the fluid conduit having an internal surface having at least a selected one of inwardly and outwardly extending projections formed thereon which induces turbulence in fluid flow in the conduit; and

a piezoelectric material attached to the conduit, the piezoelectric material producing electricity in response to pressure fluctuations in the conduit.

6. (Amended) An electrical power generator for use in conjunction with a subterranean well, the generator comprising:

a fluid conduit configured for flow of fluid therethrough; and

a piezoelectric material attached to the conduit, the piezoelectric material producing electricity in response to pressure fluctuations in the conduit,

the fluid conduit including a reduced thickness portion thereof, the piezoelectric material being attached proximate the reduced thickness portion,

the reduced thickness portion having an increased degree of flexing, in response to the pressure fluctuations in the conduit, relative to the remainder of the conduit.

9. (Amended) An electrical power generator for use in conjunction with a subterranean well, the generator comprising:

a fluid conduit configured for flow of fluid therethrough; and

a piezoelectric material attached to the conduit, the piezoelectric material producing electricity in response to pressure fluctuations in the conduit,

the fluid conduit being helically shaped.

10. (Amended) An electrical power generator for use in conjunction with a subterranean well, the generator comprising:

a fluid conduit configured for flow of fluid therethrough; and

a piezoelectric material attached to the conduit, the piezoelectric material producing electricity in response to pressure fluctuations in the conduit,

the fluid conduit having a recess internally formed thereon, the recess inducing turbulence in fluid flow through the fluid conduit.

12. (Amended) An electrical power generator for use in conjunction with a subterranean well, the generator comprising:

a fluid conduit configured for flow of fluid therethrough; and

a piezoelectric material attached to the conduit, the piezoelectric material producing electricity in response to pressure fluctuations in the conduit,

the conduit being made of a titanium material.

13. (Amended) An electrical power generator for use in conjunction with a subterranean well, the generator comprising:

a fluid conduit configured for flow of fluid therethrough; and

a piezoelectric material attached to the conduit, the piezoelectric material producing electricity in response to pressure fluctuations in the conduit,

the conduit being made of a composite material.

14. (Amended) A method of producing power in a subterranean well, the method comprising the steps of:

attaching a piezoelectric material to a reduced thickness portion of a fluid conduit;

interconnecting the fluid conduit in a tubular string;

positioning the tubular string in the well; and

flowing fluid through the fluid conduit, the piezoelectric material producing electricity in response to flexing of the reduced thickness portion created by the flowing of fluid through the conduit,

the reduced thickness portion having an increased degree of flexing, in response to the pressure fluctuations in the conduit, relative to the remainder of the conduit.

19. (Amended) A method of producing power in a subterranean well, the method comprising the steps of:

attaching a piezoelectric material to a fluid conduit;

interconnecting the fluid conduit in a tubular string;

positioning the tubular string in the well; and

flowing fluid through the fluid conduit, the piezoelectric material producing electricity in response to the flowing of fluid through the conduit,

the flowing step further comprising inducing turbulence in the fluid flowing through the fluid conduit, the inducing turbulence step further comprising shaping the fluid conduit in a manner increasing turbulence in the fluid flowing through the fluid conduit.

74. (Amended) An electrical power generator for use in conjunction with a subterranean well, the generator comprising:

a fluid conduit having an internal flow passage for flow of fluid therethrough;

a member extending into the flow passage, the member vibrating in response to fluid flow through the fluid conduit; and

a piezoelectric material producing electricity in response to vibration of the member.

81. (Amended) A method of producing power in a subterranean well, the method comprising the steps of:

interconnecting in a tubular string a fluid conduit having an internal flow passage;

positioning the tubular string in the subterranean well;

flowing fluid through the flow passage;

vibrating a member extending into the flow passage in response to the flowing fluid step; and

producing electricity from a piezoelectric material in response to the member vibrating step.

109. (Amended) An electrical power generator for use in conjunction with a subterranean well, the generator comprising:

a fluid conduit having a flow passage formed therethrough and a cavity;;

a membrane separating the flow passage from the cavity, the membrane flexing in response to pressure fluctuations in the flow passage, the cavity being generally annularly shaped and outwardly surrounding the membrane; and

a piezoelectric material disposed within the cavity, the piezoelectric material producing electricity in response to the membrane flexing.

115. (Amended) The generator according to Claim 109, wherein the piezoelectric material is generally annular shaped and outwardly surrounds the membrane.